

REMARKS/ARGUMENTS

I. Status of the claims

Claims 1-3, 6-8, 11-13, 16-18, 21-23, 26-27, 31-36, 39-42, 45-47, and 50-52 are pending with entry of this amendment. No new matter is added by the amendments.

II. Claim objections

Claim 11 was objected to for repeating the same phrase twice in a row. The phrase is now deleted with this Amendment.

Claims 12, 43 and 53 were objected to as not further limiting the claims from which they depend. Claims 43 and 53 are canceled, rendering the objection to those claims moot.

With regard to claim 12, Applicants respectfully submit that the phrase:
said nucleotides are dideoxynucleotides and said level of discrimination is
at least 3-fold lower than that of said polymerase whose sequence is
identical to that of said thermostable DNA polymerase except that "Xaa"
at position 4 is Glu

as recited in claim 12, provides functional language that further limits the sequences recited in claim 11. Claim 11 is directed to sequences that encode polymerases with a "reduced" level of discrimination between types of nucleotides. Claim 12 further limits the subject matter of claim 11 in that the polymerases in claim 12 must have a level of discrimination at least 3-fold lower than a polymerase otherwise identical except have Glu at position 4. As demonstrated by the Declaration of David Gelfand submitted in the parent application, different amino acid changes to position 4 results in different levels of discrimination. Thus, claim 12 further limits the subject matter of claim 11 to those sequences encoding polymerases with a specific level of discrimination.

Claims 2, 3, 6-8, 13, 16-18, 26, 27, 35, 36, 46, and 51-52 were objected to for depending from rejected claims. As amended, Applicants believe that all rejections have been overcome.

In view of the above remarks, Applicants respectfully request withdrawal of the objections.

III. Rejection under 35 U.S.C. § 112, first paragraph

Claims 1, 10, 11, 20-23, 29, 31-34, 37, 39, 43, 45, 47, 48, 50 and 53 were rejected as allegedly not enabled and not meeting the written description requirements. Briefly, the Examiner argued that while subject matter relating to SEQ ID NO:1 was allowable, the portions of the claims directed to SEQ ID NO:4 was not. Applicants respectfully traverse the rejections.

While Applicants disagree with the Examiner's analysis, to expedite prosecution of the remaining subject matter, Applicants have removed reference to SEQ ID NO:4 in the claims. Accordingly, Applicants respectfully request withdrawal of the rejections.

IV. Rejections under 35 U.S.C. § 103

Claim 53 was rejected as allegedly obvious over Hughes *et al.* in view of Wiemann *et al.* Claim 53 is canceled with this Amendment and therefore the rejection is moot. Withdrawal of the rejection is respectfully requested.

V. Rejections under 35 U.S.C. § 112, first paragraph

Claims 40-43 and 47 were rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite.

Claim 40 was rejected for lack of antecedent basis of "said thermostable DNA polymerase." As amended, the claims recite " ... that of a said thermostable DNA polymerase whose sequence is identical to said thermostable DNA polymerase except that position 4 is Glu." As amended, "said thermostable polymerase" refers to the thermostable DNA polymerase recited in claim 39.

Claim 47 was rejected as indefinite because it was allegedly unclear what "position 4" referred to. In view of the amendment to claim 45, from which claim 47 depends,

Appl. No. 10/052,417
Amdt. dated November 22, 2005
Amendment under 37 CFR 1.116 Expedited Procedure
Examining Group 1634

PATENT

Applicants submit that it is clear that position 4 of the thermostable DNA polymerase comprising SEQ ID NO:1 is clearly indicated.

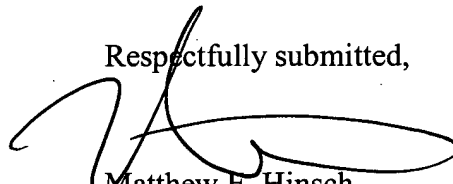
In view of the above remarks, Applicants respectfully request withdrawal of the rejections.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



Matthew E. Hinsch
Reg. No. 47,651

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 415-576-0200
Fax: 415-576-0300
Attachments
MEH:meh
60637758 v1